CLAIMS

1   1.   (Currently Amended) A method for use in a communication system, the

2   method comprising

3   a first gatekeeper receiving a request for information;

4   if the information is not known by the first gatekeeper, the first gatekeeper

5   sending the request only to a second gatekeeper,

6   if the information is not known by said second gatekeeper, the second

7   gatekeeper sending the request only to a third gatekeeper, and

8   if the information is known by the third gatekeeper, the third gatekeeper sending

9   the information to the first gatekeeper. ~~gatekeeper,~~

10   ~~the first, second and third gatekeepers being at a single gatekeeper hierarchical~~

11   ~~level, and the first gatekeeper being adapted to cache the information received by the~~

12   ~~first gatekeeper so that if said first gatekeeper is again requested for said information,~~

13   ~~said first gatekeeper will be able to provide said information to the source of the~~

14   ~~request.~~

1   2.   (Original) The invention of claim 1 wherein the third gatekeeper sends the

2   information to the first gatekeeper via the second gatekeeper.

1   3.   (Original) The invention of claim 1 wherein each of said first, second and

2   third gatekeepers communicates with respective subscriber terminals.

        4.   Canceled.

        5.   (Original) The invention of claim 3 wherein the requested information is an
address.

1   6.   (Original) The invention of claim 5 wherein said address is an application

2   address, a network address or a resource address.

2

1   7.   (Original) The invention of claim 6 wherein each of said first, second and

2   third gatekeepers establishes communication between its respective subscriber

3   terminals.

1   8.   (Original) The invention of claim 3 wherein the requested information is

2   information about a resource.

1   9.   (Original) The invention of claim 8 wherein each of said first, second and

2   third gatekeepers establishes communication between its respective subscriber

3   terminals.

1   10. (Original) The invention of claim 8 wherein said resource is one of:

2   bandwidth, a port, a buffer, a link, a trunk, processing unit capacity, and a quality-of-

3   service parameter.

1   11. (Original) The invention of claim 3 wherein each of the gatekeepers is

2   adapted to use signaling messages conforming to International Telecommunications

3   Union standard H.323 to receive and transmit information between at least itself and its

4   respective subscriber terminals.

1   12. (Currently Amended) A gatekeeper for use in a communication system,

2   said gatekeeper comprising

3   a processor; and

4   a memory coupled to said processor, said memory storing instructions adapted

5   to be executed by said processor for performing the steps of:

6   (a) receiving at said gatekeeper a request for information;

7   (b) determining whether the information is known by said gatekeeper;

8   (c) if the information is not known by said gatekeeper, sending the

9   request via a second gatekeeper to a third gatekeeper, all three of said

10   gatekeepers being at a single gatekeeper hierarchical level; and

3

11   (d) receiving the requested information from the third <u>gatekeeper.</u>

12   ~~gatekeeper;~~

13   ~~wherein said gatekeeper is adapted to cache the information received from the~~

14   ~~third gatekeeper so that if said gatekeeper is again requested for said information, it will~~

15   ~~be able to provide said information to the source of the request.~~

1   13. (Original) The invention of claim 12 wherein said requested information is

2   received from the third gatekeeper via the second gatekeeper.

          14. Canceled.

1   15. (Original) The invention of claim 12 wherein the requested information is

2   an address.

1   16. (Original) The invention of claim 15 wherein said address is an application

2   address, a network address or a resource address.

1   17. (Original) The invention of claim 12 wherein the requested information is

2   information about a resource.

1   18. (Original) The invention of claim 17 wherein said resource is one of:

2   bandwidth, a port, a buffer, a link, a trunk, processing unit capacity, and a quality-of-

3   service parameter.

1   19. (Original) The invention of claim 12 wherein said gatekeeper is adapted to

2   use signaling messages conforming to International Telecommunications Union

3   standard H.323 to receive and transmit information between itself and at least one other

4   gatekeeper and to communicate with said each gatekeeper's associated communicating

5   entities.

4

1   20.   (Currently Amended) A communication system comprising at least first

2   through third gatekeepers and a plurality of communicating entities, said first through

3   third gatekeepers being adapted to receive and transmit signaling messages among

4   themselves and each of the first through third gatekeepers being adapted to receive and

5   transmit signaling messages between itself and associated ones of the communicating

6   entities and each of the first through third gatekeepers being further adapted to establish

7   communication between said its associated communicating entities, wherein

8   said first gatekeeper directly communicates gatekeeper-to-gatekeeper

9   information request signaling messages only with said second gatekeeper,

10   said second gatekeeper directly communicates gatekeeper-to-gatekeeper

11   information request signaling messages with said first gatekeeper and said third

12   gatekeeper,

13   said third gatekeeper directly communicates gatekeeper-to-gatekeeper

14   information request signaling messages with said second gatekeeper but not with said

15   first gatekeeper,

16   said first, second and third gatekeepers all being at a single gatekeeper

17   hierarchical level within said communication system. ~~system, and~~

18   ~~each particular gatekeeper that receives requested information from another one~~

19   ~~of the gatekeepers stores that information within that particular gatekeeper so that if that~~

20   ~~particular gatekeeper is again requested for said information, it will be able to provide~~

21   ~~said information to the source of the request.~~

      21. Canceled

1   22. (Original) The invention of claim 20 wherein ones of said gatekeeper-to-

2   gatekeeper signaling messages include requests for at least one of an application

3   address, a network address or a resource address.

1   23. (Original) The invention of claim 20 wherein ones of said gatekeeper-to-

2   gatekeeper signaling messages include requests for information about a resource.

5

1   24. (Original) The invention of claim 23 wherein said resource is one of:

2   bandwidth, a port, a buffer, a link, a trunk, processing unit capacity, and a quality-of-

3   service parameter.

1   25. (Original) The invention of claim 20 wherein at least said gatekeeper-to-

2   gatekeeper signaling messages conform to an international standard for packet-based

3   communications.

1   26. (Original) The invention of claim 20 wherein at least ones of the

2   communicating entities are terminals, gateways, multipoint control units or

3   communication networks.

1   27. (New) The invention of claim 3 wherein the first gatekeeper is adapted to

2   cache the information received by the first gatekeeper so that if said first gatekeeper is

3   again requested for said information, said first gatekeeper will be able to provide said

4   information to the source of the request.

1   28. (New) The invention of claim 12 wherein said gatekeeper is adapted to

2   cache the information received from the third gatekeeper so that if said gatekeeper is

3   again requested for said information, it will be able to provide said information to the

4   source of the request.

1   29. (New) The invention of claim 20 wherein each particular gatekeeper that

2   receives requested information from another one of the gatekeepers stores that

3   information within that particular gatekeeper so that if that particular gatekeeper is

4   again requested for said information, it will be able to provide said information to the

5   source of the request.

6